

What is claimed is:

1. A photo-polymerizable ink-jet ink composition, comprising:

i) a photo-polymerizable resin consisting of
5 photo-polymerizable monomers,

ii) a photo-polymerization initiator, and

iii) a coloring material,

the ink composition being substantially free from
a solvent,

10 wherein the photo-polymerizable monomers contain a hexa-functional monomer in a proportion falling within the range of 10% by weight to 30% by weight with respect to a total amount of the ink composition, and

15 the photo-polymerizable monomer other than the hexa-functional monomer is selected from the group consisting of a bi-functional monomer, a combination of a bi-functional monomer and a mono-functional monomer, a combination of a bi-functional monomer and a tri-functional monomer, and a combination of a bi-functional monomer, a
20 mono-functional monomer, and a tri-functional monomer.

2. A photo-polymerizable ink-jet ink composition as defined in Claim 1 wherein a viscosity of the ink composition at a temperature of 23°C is at most 50cps.